

REMARKS

After entry of this Amendment, the pending claims are: claims 1-13 and 15-28. The Office Action dated October 9, 2007 has been carefully considered. Claim 14 was previously canceled without prejudice. Claims 1, 6 and 20 have been amended. The Examiner is thanked for the indication of allowable subject matter in claims 13 and 19. Claim 28 has been added. Support for the amendments to claims 1, 6, and 20 and for newly added claim 28 can be found throughout the Specification and Drawings and specifically in paragraph Nos. 28, 31, and 32 and drawing Nos. 1 and 2. No new matter has been added. Reconsideration and allowance of the pending claims in view of the above Amendments and the following Remarks is respectfully requested.

In the Office Action dated October 9, 2007, the Examiner:

- rejected claims 1-13 and 15-27 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 7,014,608;
- rejected claims 1-12, 15-18, and 20-27 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,728,046 to Mayer *et al.* ("Mayer") in view of U.S. Patent No. 7,261,688 to Smith *et al.* ("Smith"); and
- indicated that the subject matter in claims 13 and 19 was allowable but for the nonstatutory obviousness-type double patenting rejection.

NONSTATUTORY OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTION

Claims 1-13 and 15-27 were rejected on the ground of nonstatutory obviousness-type

double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 7,014,608. The Examiner indicated that a timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) could be used to overcome the nonstatutory double patenting rejection. Applicants respectfully submit that a terminal disclaimer will be filed, if still necessary, when claims 1-13 and 15-27 are deemed allowable but for the requirement of a terminal disclaimer.

INDEPENDENT CLAIM 1

Independent claim 1 has been rejected as being unpatentable over Mayer in view of Smith. It is respectfully submitted that the Examiner has not identified any reason why a person of ordinary skill in the art would combined Mayer and Smith other than it would teach all of the elements of independent claim 1. (*See KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. ____ (2007) “[a] patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently known, in the prior art ... important to identify a reason that would have prompted a person of ordinary skill in the art to combine the elements as the new invention does.”) It is respectfully submitted that the Applicants through their own effort and expense derived the device as claimed in independent claim 1. It is respectfully submitted that without the benefit of the Applicants' disclosure, it would not be obvious for one of ordinary skill in the art to redesign Mayer to incorporate first and second walls that are moveably coupled via a hinge as disclosed by Smith.

If anything, incorporating first and second retaining walls wherein the first and second retaining walls are moveably coupled relative to one another via a hinge as disclosed by Smith is completely contrary to the explicit teachings of Mayer whose purpose was to provide a retractor incorporating first, second, third and fourth arms 1, 2, 3, 4 wherein each of the arms 1, 2, 3, 4 is connected to one or more

retractor blades so that each of the blades is moveable with respect to its respective arm. That is, for example, retractor blades 18, 19 are moveable along arm 3. Modifying the structure of the retractor in Mayer to incorporate first and second retaining walls which are moveably coupled to one another, as disclosed in Smith, would defeat this objective.

In addition, it is respectfully submitted that even if the combination of Mayer and Smith was proper, which in our opinion and judgment it is not, the combination would still not disclose each and every limitation of independent claim 1. Independent claim 1 recites, *inter alia*, a frame having a top surface and a first guide receiving channel formed in the top surface; a first tissue retaining wall; a second tissue retaining wall, the first and second tissue retaining walls defining a space, and a first guide having an end, at least a portion of the first guide being sized and dimensioned to be received within the space defined by the first and second tissue retaining walls such that at least a portion of the guide extends through the top surface of the frame and through the first guide receiving channel. It is respectfully submitted that neither Mayer nor Smith, either alone or in combination, disclose, teach or suggest a frame having a first guide receiving channel formed in the top surface thereof such that at least a portion of the guide extends through the top surface of the frame and through the first guide receiving channel.

Mayer discloses a surgical retractor including four arms 1, 2, 3, 4 which are joined together to form a square frame 5. Retractor blade 7 is connected to arm 1 via an eyelet 6. Two holders 8, 9 are mounted to arm 3. A holding arm 10, 11 is mounted on each holder 8, 9. Each holding arm 10, 11 carries at its free end a retractor blade 18, 19, respectively. A holder 20, 21 is mounted for free

displacement on each of the two other arms 2, 4, respectively. Each holder 20, 21 comprises a through-bore 28 which extends transversely to the arms 2, 4, respectively, and through which a threaded spindle 29 passes. The relative position of the threaded spindle 29 in relation to these holders 20, 21 can be adjusted by turning nuts 30, 31. The threaded spindle 29 extends into a retractor body 32 which protrudes vertically from the plane of the frame 5. The retractor body 32 is similar in design to a retractor blade but is sufficiently thick to accommodate a blind borehole 33 which extends from its lower end face 34. The blind borehole 33 serves to receive a rod-shaped extension 35 of a bone screw 36.

When inserting the retractor, two bone screws 36 are first screwed with their extensions 35 into the patient's bone in such a way that the extensions 35 extend parallel to each other. The retractor is then lowered from above onto the extensions 35 in such a way that the two extensions 35 of the two bone screws 36 dip into corresponding blind boreholes 33 in the two support feet 39, 40 which are each formed by the threaded spindle 29 and the retractor body 32 formed thereon. The frame 5 can be fixed in the desired relative position in relation to the support feet 39, 40 by clamping screws 22, 23 and by nuts 30, 31 so that a rigid connection of the frame 5 to the vertebral bodies 37, 38 is achievable. Finally, the retractor blades 18, 19 are displaceable to their desired position in relation to the frame 5.

It is respectfully submitted that there is absolutely no disclosure, teaching or suggestion in Mayer of a frame having a first guide receiving channel formed in the top surface thereof such that at least a portion of a guide extends through the top surface of the frame and through the first guide receiving channel. Rather, as previously described, Mayer, at best, discloses a guide that is connected to a frame

via a support foot 39 and holder 20. Thus, it is respectfully submitted that Mayer does not disclose, teach or suggest all of the limitations of independent claim 1.

Moreover, it is respectfully submitted that Smith does not overcome the shortcomings of Mayer, as there is absolutely no disclosure, teaching or suggestion of a guide in Smith.

Therefore, for at least the above-identified reasons, it is respectfully submitted that neither Mayer or Smith, either alone or in combination, disclose, teach or suggest all of the limitations of independent claim 1. Thus, it is respectfully submitted that independent claim 1 is allowable over the cited prior art. Withdrawal of this rejection and allowance of independent claim 1 is respectfully requested.

Furthermore, as claims 2-5, 7-12, 15-18 and 25-27 all depend from independent claim 1, it is submitted that these claims are equally allowable. Withdrawal of these rejections and allowance of claims 2-5, 7-12, 15-18 and 25-27 is also respectfully requested.

INDEPENDENT CLAIM 6

Independent claim 6 has been rejected as being as being unpatentable over Mayer in view of Smith. Independent claim 6 recites, *inter alia*, a retractor comprising a frame having a top surface and a first guide receiving channel formed in the top surface; a substantially continuous tissue retaining wall, the tissue retaining wall having a plurality of living hinges so that at least one portion of the retaining wall is moveable with respect to another portion of the retaining wall so that the tissue retaining wall is moveable between a closed position and an open position; wherein at least a portion of the tissue retaining wall is coupled to the frame; and a first guide having an end, at least a portion of the first guide

being sized and dimensioned to be received in-between the first and second tissue retaining walls such that at least a portion of the guide extends in-between the first and second tissue retaining walls and through the first guide receiving channel formed in the top surface of the frame.

For reasons similar to those described above in connection with independent claim 1, it is respectfully submitted that neither Mayer nor Smith, either alone or in combination, disclose, teach or suggest a frame having a first guide receiving channel formed in the top surface thereof such that at least a portion of a guide extends in-between the first and second tissue retaining walls and through the first guide receiving channel formed in the top surface of the frame.

Therefore, it is respectfully submitted that neither Mayer nor Smith, either alone or in combination, disclose, teach, or suggest all of the limitations of independent claim 6. Thus, it is respectfully submitted that independent claim 6 is allowable over the cited prior art. Withdrawal of this rejection and allowance of independent claim 6 is respectfully requested.

In addition, as amended, independent claim 6 recites, *inter alia*, a substantially continuous tissue retaining wall, the tissue retaining wall having a plurality of living hinges so that at least one portion of the retaining wall is moveable with respect to another portion of the retaining wall so that the tissue retaining wall is moveable between a closed position and an open position.

It is respectfully submitted that there is absolutely no disclosure, teaching or suggestion in either Mayer or Smith of a living hinge. Therefore, it is respectfully submitted that neither Mayer nor Smith, either alone or in combination, disclose, teach, or suggest all of the limitations of independent claim 6

for at least this reason as well. Thus, it is respectfully submitted that independent claim 6 is allowable over the cited prior art. Withdrawal of this rejection and allowance of independent claim 6 is respectfully requested.

INDEPENDENT CLAIM 20

Independent claim 20 has been rejected as being unpatentable over Mayer in view of Smith. Independent claim 20 recites, *inter alia*, a method of inserting a tissue retractor into a patient, comprising: providing a retractor having a substantially continuous tissue retaining wall, the tissue retaining wall defining a space, the tissue retaining wall including a plurality of hinges so that at least one portion of the retaining wall is moveable with respect to another portion of the retaining wall so that the tissue retaining wall is moveable between a closed position and an open position, the space being larger in the opened position than in the closed position, and a frame having a top surface and first and second guide receiving areas formed in the top surface; percutaneously implanting first and second guides into different areas of bone in the patient; positioning upper ends of the first and second guides into the space while the tissue retaining wall is in the closed position and through the first and second guide receiving areas, respectively, thereby inserting the retractor into tissue of the patient; and moving the tissue retracting surfaces apart from one another independently of the first and second guides.

For reasons similar to those described above in connection with independent claim 1, it is respectfully submitted that neither Mayer nor Smith, either alone or in combination, disclose, teach or suggest a retractor having a frame having first and second guide receiving areas formed in the top surface thereof so that the upper ends of the first and second guides can be positioned into the space

while the tissue retaining wall is in the closed position and through the first and second guide receiving areas formed in the top surface of the frame.

Therefore, it is respectfully submitted that neither Mayer nor Smith, either alone or in combination, disclose, teach, or suggest all of the limitations of independent claim 20. Thus, it is respectfully submitted that independent claim 20 is allowable over the cited prior art. Withdrawal of this rejection and allowance of independent claim 20 is respectfully requested.

Furthermore, as claims 21-24 depend from independent claim 20, it is submitted that claims 21-24 are equally allowable. Withdrawal of these rejections and allowance of claims 21-24 is also respectfully requested.

NEWLY ADDED INDEPENDENT CLAIM 28

Independent claim 28 recites, *inter alia*, a retractor comprising a frame having a top surface and at least one two guide receiving channels formed in the top surface; a substantially continuous tissue retaining wall defining a space, the tissue retaining wall including at least one hinge so that at least one portion of the retaining wall is moveable with respect to another portion of the retaining wall so that the tissue retaining wall is moveable between a closed position and an open position, the space being larger when the tissue retaining wall is in the opened position than when the tissue retaining wall is in the closed position; and at least two guides, each guide having an end, at least a portion of the guides being sized and dimensioned to be received within the space defined by the substantially continuous tissue retaining wall such that at least a portion of the guides extend through the top surface of the frame and

through the guide receiving channels respectively, the end of each guide being sized and dimensioned to be insertable into an area of bone.

For reasons similar to those described above in connection with independent claim 1, it is respectfully submitted that neither Mayer nor Smith, either alone or in combination, disclose, teach or suggest a retractor having at least two guide receiving channels formed in the top surface thereof so that at least a portion of the guides extend through the top surface of the frame and through the guide receiving channels.

Therefore, it is respectfully submitted that neither Mayer nor Smith, either alone or in combination, disclose, teach, or suggest all of the limitations of newly added independent claim 28. Thus, it is respectfully submitted that independent claim 28 is allowable over the cited prior art. Allowance of independent claim 28 is respectfully requested.

In addition, independent claim 28 recites, *inter alia*, a retractor wherein the retractor has a length and a width, the length of the retractor being at least twice as long as the width when the tissue retaining wall is in the closed position.

It is respectfully submitted that there is absolutely no disclosure, teaching or suggestion in either Mayer or Smith of the length of the retractor being at least twice as long as the width when the tissue retaining wall is in the closed position. Therefore, it is respectfully submitted that neither Mayer nor Smith, either alone or in combination, disclose, teach, or suggest all of the limitations of independent claim 28 for at least this reason as well. Thus, it is respectfully submitted that independent claim 28 is allowable over the cited prior art. Allowance of independent claim 28 is respectfully requested.

CONCLUSION

A fee of \$1,020.00 is believed due for this submission (for RCE filing fee and the addition of one new independent claim). The Commissioner is authorized to charge this and any other fee which may now or hereafter be due in this application to Deposit Account No. 19-4709.

In the event that there are any questions, or should additional information be required, please contact Applicants' attorney at the number listed below.

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Respectfully submitted,

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